

## MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

## **NOTICE OF ACCEPTANCE (NOA)**

Commercial Innovations, Inc. 9105 Way Ave. Cleveland, OH. 44105

#### **SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION:** Solar Brite Single Ply Roof Systems over Concrete Decks.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

Stephan

This NOA consists of pages 1 through 47.

The submitted documentation was reviewed by Alex Tigera.

MIAMI-DADE COUNTY
APPROVED

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### **ROOFING SYSTEM APPROVAL**

Category:RoofingSub-Category:Single PlyMaterial:KEEDeck Type:ConcreteMaximum Design Pressure-572.5 psf

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

Product	Dimensions	Test <b>Specification</b>	Product Description
	<u></u>	<u> </u>	
Solar Brite EV, Solar Brite	Various	ASTM D 6754	Polyester reinforced KEE membrane.
Solar Brite EVFB, Solar Brite FB	Various	ASTM D 6754	KEE, fleece-backed, polyester reinforced, single ply membrane
LA432 Bonding Adhesive		Proprietary	Two side "contact" bonding adhesive
LA432M Bonding Adhesive		Proprietary	Solvent based bonding adhesive
FA561M Water Borne Adhesive		Proprietary	One side "substrate only" fleece back solvent based adhesive
FA636 Water Borne Adhesive		Proprietary	One side "substrate only" fleece backed water based adhesive
Millennium One Step™ Foamable Adhesive		Proprietary	Elastomeric, One step foamable adhesive
Tuff Trac	0.080" x 28" or 56" x 43' 1/4" x 24" x 48"	N/A	Vinyl walk way Vinyl protection pad



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## **APPROVED INSULATIONS:**

#### TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer</u> (With Current NOA)
ACFoam-III, ACFoam-IV	Isocyanurate Insulation	Atlas Roofing Corporation
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
H-Shield, H-Shield CG	Polyisocyanurate Insulation	Hunter Panels, LLC
ENRGY 3, ENRGY 3 25 PSI, JM ISO 3	Isocyanurate Insulation	Johns Manville Corporation
XPS	Type IV Extruded polystyrene with a minimum density of 1.6 pcf	Generic
EPS	Type IX Expanded polystyrene with a minimum density of 1.8 pcf	Generic
Multi-Max 3, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum Coverboard	United States Gypsum Corporation
FiberTop E	Wood Fiber insulation board.	Firestone Building Products Company, LLC



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## **APPROVED FASTENERS:**

#### TABLE 3

<u>Fastener</u> <u>Number</u>	<u>Product</u> <u>Name</u>	<u>Product</u> <u>Description</u>	<u>Dimensions</u>	Manufacturer (With Current NOA)
1.	Dekfast 1.5" x 2.5" Oval Barbed Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	SFS Intec, Inc.
2.	Dekfast Galvalume Steel Round 2-3/8 in 20-Ga. Barbed Plate	Barbed, galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.
3.	Dekfast isofast IF-2.375- AT Membrane Plate	Galvalume AZ50 stress plate, #15 belted fasteners	2-3/8" Dia.	SFS Intec, Inc.
4.	Dekfast 12 & 14	Insulation and membrane fasteners	Various	SFS Intec, Inc.
5.	Dekfast 15 HS	Carbon steel fastener for concrete, steel and wood decks	Various	SFS Intec, Inc.
6.	Dekfast Galvalume Steel Hex	Galvalume AZ50 steel plate	2 7/8" x 3 ½"	SFS Intec, Inc.
7.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 steel plate	3" round	Altenloh, Brinck & Co. U.S., Inc.
8.	#14 Roofgrip	Membrane and Insulation fasteners	Various	OMG, Inc.
9.	CD-10	Membrane and Insulation Fastener	Various	OMG, Inc.
10.	Trufast #21 SHD Fastener	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
11.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
12.	Trufast 2-3/4" Barbed Metal Seam Plate	AZ-55 Galvalume steel stress plate	2.75" round	Altenloh, Brinck & Co. U.S., Inc.
13.	Dekfast 1.5" x 2.75" Oval Barbed Plate	Oval stress plate	1.5" x 2.75"	SFS Intec, Inc.



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## **EVIDENCE SUBMITTED:**

Test Agency/Identifier	<u>Name</u>	Report	<b>Date</b>
Factory Mutual Research Corp.	FM 4470	1Z2A5.AM	01/12/96
1	FM 4470	1Z3A8.AM	08/13.97
	FM 4470	3003251	10/05/99
	FM 4470	4D5A4.AM	10/05/99
	FM 4470	3002471	10/06/99
	FM4450	3009610	10/22/01
	FM 4470	3019313	
	FM 4470	3028651	04/17/08
	FM 4470	3036192	11/23/09
	FM 4470	3033396	09/04/09
	FM 4470	3037770	10/22/09
	FM 4470	3013125	09/23/03
	FM 4470	3013068	09/23/03
	FM 4470	3032172	06/12/09
	FM 4470	3012321	07/29/02
	FM 4470	3019313	
Underwriters Laboratories	UL790	95NK17212	08/21/98
	UL790	94NK12810	8/11/98
Exterior Research & Design, LLC	TAS 114	4015.10.96-1-R1	07/20/10
	TAS 114	4006.07.97-1-R1	07/15/10
	TAS 114	4020.08.99-1-R1	07/15/10
	TAS 114	4006.08.00-1-R1	10/18/05
	TAS 114	02843.02.05-08	02/04/05
	TAS 114	02843.03.05-1	03/25/05
	TAS 114	02767.09.05-S1	09/27/05
	TAS 117 & ASTM D6862	C8500SC.11.07-R1	08/07/09
	FM 4470 / TAS 114	S32410.09.10	09/21/10
	FM 4470 / TAS 114	S13040.02.09-R1	03/06/09
	ASTM D6754	S34070.06.11-R1	06/18/12
Trinity   ERD	ASTM D 6754	S34070.06.11-R3	05/30/13
PRI Construction Materials Technologies LLC	ASTM D 3747	HGC-142-02-03	02/09/12



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#### **APPROVED ASSEMBLIES**

**Membrane Type:** Single Ply, KEE

**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(1): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

**Approved EPS or XPS** 

Minimum 1.5" thick N/A N/A

<u>Top Insulation Layer</u> <u>Insulation Fasteners</u> <u>Fastener</u>

(Table 3) Density/ft<sup>2</sup>

DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum 0.25" thick N/A N/A

Note: All insulation shall be adhered to the deck in 3" to 3.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Primer:** Any approved ASTM D41 Asphaltic Primer

Vapor Retarder: Cold-applied base and/or ply sheet approved for use with the roof cover followed by an

additional approved cold-applied sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal. Laps are

sealed with 1.5-inch heat weld.

or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft<sup>2</sup>/gal or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -67.5 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(2): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> Density/ft²
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5 " thick	N/A	N/A
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Cold-applied vapor retarder as indicated below:

Cold-applied: (Optional) cold-applied base and/or ply sheet approved for use with the roof cover followed

by an additional approved cold-applied sheet.

Membrane: Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M

Bonding Adhesive adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and

to the substrate. Laps are sealed with 1.5-inch heat weld.

or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq., FA561M Water Borne Adhesive at 1 gal/sq. or FA636 Water Borne Adhesive at 100 ft<sup>2</sup>/gal.

Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -67.5 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(3): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional)Insulation Fasteners<br/>(Table 3)Fastener<br/>Density/ft²ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3N/AN/AMinimum: 1.5" thickN/AN/A

Top Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum: 0.25 " thick N/A N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Cold-applied vapor retarder as indicated below:

**Cold-applied:** (Optional) Cold-applied base and/or ply sheet approved for use with the roof cover followed

by an additional cold-applied sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M

Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the

substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne Adhesive at 100

ft²/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -67.5 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(4): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3

Minimum: 1.5" thick N/A N/A

Top Insulation Layer Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3

Minimum: 1.5 " thick N/A N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Hot-applied, Self-Adhering or Torch-applied vapor retarder as indicated below:

**Hot-applied:** (Optional) Hot asphalt-applied base and/or ply sheets approved for use with roof cover

followed by an additional approved asphalt-applied sheet.

**Self-Adhered:** (Optional) Self-adhered base membrane approved for use with roof cover followed by an

additional approved self-adhered sheet.

**Torch-applied:** (Optional) Hot asphalt-applied base and/or ply sheets or optional torch-applied base

membrane approved for use with roof cover followed by an additional approved torch-applied

sheet.



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Solar Brite EVFB or Solar Brite FB roof cover adhered with FA561M Water Borne Adhesive at 1 gal/sq or FA636 Water Borne Adhesive at 100 ft²/gal.

Maximum Design Pressure: -105 psf (See General Limitation #9)

 $O_1$ 

Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.

Maximum Design Pressure: -169 psf with torch-applied vapor retarder (See General Limitation #9)

Maximum Design Pressure: -210 psf with hot-applied, self-adhered or no vapor retrarder (See General Limitation #9)

**Maximum Design** 

**Pressure:** See Membrane Options above



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(5): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	<u>Insulation Fasteners</u> ( <u>Table 3)</u>	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>

ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3

Tapered N/A N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethance Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Hot-applied, Self-Adhering or Torch-applied vapor retarder as indicated below:

**Hot-applied:** (Optional) Hot asphalt-applied base and/or ply sheets approved for use with roof cover

followed by an additional asphalt-applied sheet.

**Self-Adhered:** (Optional) Self-adhered base membrane approved for use with roof cover followed by an

additional approved self-adhered sheet.

**Torch-applied:** (Optional) Hot asphalt-applied base and/or ply sheets or optional torch-applied base

membrane approved for use with roof cover followed by an additional approved torch-applied

sheet.



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 11 of 47 Membrane:

Solar Brite EVFB or Solar Brite FB roof cover adhered with FTR-390 adhesive at 1 gal. per 60 ft<sup>2</sup>.

Maximum Design Pressure: -67.5 psf (See General Limitation #9)

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with FA561M Water Borne Adhesive

at 1 gal/sq or FA636 Water Borne Adhesive at 100 ft<sup>2</sup>/gal.

Maximum Design Pressure: -105 psf (See General Limitation #9)

Or

Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the

substrate.

Maximum Design Pressure: -117 psf (See General Limitation #9)

Maximum Design Pressure:

See Membrane Options above



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(6): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam II, Multi-Max FA-3, ENRGY 3, Approved EPS or XPS Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional, required over EPS)	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam II, Multi-Max FA-3, ENRGY 3, Approved EPS or XPS Minimum 1.5" thick	N/A	N/A
DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in ¾" to 1" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft².. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** None.

Fire Barrier: None.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.



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-82.5 psf (for forMillennium One Step™ Foamable Adhesive, Insta-Stik or OlyBond Fastener Adhesive)

(See General Limitation #9)

-90 psf (for for Insta-Stik & Solar Brite EVFB or Solar Brite FB Application)

(See General Limitation #9)

-120 psf (for for Insta-Stik & Solar Brite EV or Solar Brite Application)

(See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(7): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-III, ACFoam-III, Multi-Max FA-3, H-Shield Minimum 1.5" thick	N/A	N/A
DensDeck, DensDeck Prime Minimum 0.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-III, ACFoam-III, Multi-Max FA-3, H-Shield Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck in 3-3.5" wide beads spaced 12" o.c. of TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder may be installed over the deck.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636

Water Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -90.0 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(8): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
ACFoam-II, Multi-Max-3, ENRGY 3, H-Shield Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	<u>Insulation Fasteners</u> ( <u>Table 3)</u>	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
DensDeck, DensDeck Prime or SECUROCK Gypsum-Fibe Minimum 0.25" thick	er Roof Board N/A	N/A

Note: All insulation shall be adhered to the deck in ½" to ¾" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder may be installed over the deck or the

base layer of insulation.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water

Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design
-157.5 psf (with vapor retarder) (See General Limitation #9)
Pressure:
-232.5 psf (with no vapor retarder) (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(9): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional)Insulation FastenersFastener(Table 3)Density/ft²

ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 or Approved EPS or XPS

Minimum: 1.5" thick N/A N/A

Top Insulation Layer Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum: 0.25 " thick N/A N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Torch-applied vapor retarder as indicated below:

Torch-applied: (Optional) Hot asphalt-applied base and/or ply sheets or optional torch-applied base

membrane approved for use with roof cover followed by an additional approved torch-applied

sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M

Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the

substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq. or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne Adhesive at 100

ft²/gal. Laps are sealed with 1.5-inch heat weld

**Maximum Design** 

**Pressure:** -169 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(10): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
Approved EPS or XPS		
Minimum: 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board	,	·
Minimum: 0.25 " thick	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Hot-applied or Self-Adhering vapor retarder as indicated below:

Hot-applied: (Optional) Hot asphalt-applied base and/or ply sheets approved for use with roof cover

followed by an additional approved asphalt-applied sheet.

**Self-Adhered:** (Optional) Self-adhered base membrane approved for use with roof cover followed by an

additional approved self-adhered sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M

Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the

substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne Adhesive at 100

ft²/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -180 psf (See General Limitation #9)



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Deck Type 3I: Concrete Decks, Insulated

Min. 2500 psi structural concrete or concrete plank **Deck Description:** 

One or more layers of insulation adhered with approved adhesive, membrane adhered System Type A(11):

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

**Base Insulation Layer Insulation Fasteners** Fastener (Table 3) Density/ft<sup>2</sup> **Approved EPS or XPS** 

Minimum 1.0" thick (Maximum 4'x4') N/A N/A

**Top Insulation Layer Insulation Fasteners** Fastener Density/ft<sup>2</sup> (Table 3)

DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board

Minimum 0.25" thick N/A N/A

Note: All insulation shall be adhered to the deck in ½" to ¾" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** None

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

> Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636

Water Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

-202.5 psf (See General Limitation #9) Pressure:



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type A(12):** All layers of insulation adhered subsequently membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

H-Shield, ENRGY 3, ACFoam-II, Multi-Max FA-3

Minimum 1.0" thick N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft2. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Vapor Barrier:** (Optional) Any approved asphaltic vapor barrier.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. Laps are

sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressures:** -210.0 psf (See General Limitation #9.)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min, 2500 psi structural concrete or concrete plank

**System Type A(13):** One or more layers of insulation adhered with approved asphalt, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum 1.5" thick	N/A	N/A
DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Vapor Retarders: (Optional) Any UL or FM approved asphaltic vapor retarder may be installed over the

substrate.

**Fire Barrier:** None.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -240 psf; (See General Limitation #9.)



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Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(14): One or more layers of insulation adhered with approved adhesive, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, ACFoam-III, Multi-Max FA-3, H-Shield Minimum 1.5" thick	N/A	N/A
DensDeck, DensDeck Prime Minimum 0.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in 3-3.5" wide beads spaced 12" o.c. of TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder may be installed over the deck.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

> Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636

Water Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -240.0 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(15): One or more layers of insulation adhered with approved adhesive, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation LayerInsulation Fasteners<br/>(Table 3)Fastener<br/>Density/ft²ACFoam-II, ACFoam-IIIN/AN/AMinimum 1.5" thickN/AN/A

Note: All insulation shall be adhered to the deck in 3-3.5" wide beads spaced 12" o.c. of TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Vapor Retarders: None

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636

Water Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -240.0 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(16): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional) Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 or Approved EPS or XPS(min. 2.0 pcf)

Minimum: 1.5" thick N/A N/A

Top Insulation Layer Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum: <sup>1</sup>/<sub>4</sub> " thick N/A N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Hot-applied or Self-Adhering vapor retarder as indicated below:

Hot-applied: (Optional) Hot asphalt-applied base and/or ply sheets approved for use with roof cover

followed by an additional approved asphalt-applied sheet.

Self-Adhered: (Optional) Self-adhered base membrane approved for use with roof cover followed by an

additional approved self-adhered sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered with LA432 Bonding Adhesive or LA432M

Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the

substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq., or FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne Adhesive at 100

ft²/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressure:** -240 psf (See General Limitation #9)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(17): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-IV	<del></del>	<del> </del>
Minimum 2.0" thick	N/A	N/A
Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A
ACFoam-III		
Minimum 1.3" thick	N/A	N/A
H-Shield CG, JM ISO 3 or ENRGY 3		
Minimum 1.0" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners	Fastener
<u> 10p 1110 mm 101                        </u>	(Table 3)	Density/ft <sup>2</sup>
SECUROCK Gypsum-Fiber Roof Board, DensDeck, DensDeck Prin	ne	
Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in 1.5" ribbons spaced 12" o.c. Adhesive shall be allowed to sit for approx. 1 minute before insulation is applied. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432M Bonding

Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal.

Or

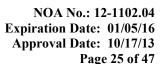
Solar Brite EVFB or Solar Brite FB roof cover adhered to the top insulation layer with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft²/gal., or FA636

Water Borne Adhesive at 100 ft<sup>2</sup>/gal.

**Maximum Design** 

**Pressure:** 

-240.0 psf (See General Limitation # 9)



MIAMI-DADE COUNTY
APPROVED

**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(18): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	<u>Insulation Fasteners</u> (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II		
Minimum 2" thick	N/A	N/A
<b>Top Insulation Layer</b>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" to 1" wide beads 12" o.c. of Insta-Stik Adhesive or OlyBond 500, TITE-SET Roofing Adhesive, 3M Polyurethane Foam Insulation Adhesive CR-20, Millennium One Step™ Foamable Insulation Adhesive or full mopping of approved asphalt At a rate of 25 lbs/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft²/gal. Laps

are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft²/gal or FA636 Water

Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressures:** 

-247.5 psf (See General Limitation #9.)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(19): One or more layers of insulation adhered with approved <u>adhesive</u>, membrane adhered

#### All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	<u>Insulation Fasteners</u> (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, ACFoam-III, JM ISO 3, Multi-Max FA-3 Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fibe Minimum 0.5" thick	r Roof Board N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in 3" to 3.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft<sup>2</sup>/gal, or FA636 Water

Borne Adhesive at 100 ft²/gal

**Maximum Design** 

**Pressures:** 

-262.5 psf (See General Limitation #9)



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 27 of 47 Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type A(20): All layers of insulation adhered subsequently membrane adhered.

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

**ENRGY 3, ACFoam-II, H-Shield** 

Minimum 1.5" thick N/A N/A

Top Insulation Layer (Optional)Insulation FastenersFastener(Table 3)Density/ft²

DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board

Minimum 0.25" thick N/A N/A

Note: All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432M Bonding

Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the top insulation layer with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft<sup>2</sup>/gal., FTR-390 asphalt based adhesive at 1 gal. per 60 ft<sup>2</sup> or FA636 Water Borne Adhesive at 100 ft<sup>2</sup>/gal.

Note: Asphalt application shall only be used when adhering to gypsum-based insulation

only.

**Maximum Design** 

**Pressure:** 

gn

-290 psf; (See General Limitation #9.)



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 28 of 47 Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type A(21):** All layers of insulation adhered subsequently membrane adhered.

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation LayerInsulation Fasteners<br/>(Table 3)Fastener<br/>Density/ft²

ENRGY 3, ACFoam-II, H-Shield

Minimum 1.5" thick N/A N/A

Note: All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432M Bonding

Adhesive applied at an application rate of 50 ft²/gal.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the top insulation layer with FA561M Water Borne Adhesive at 90 ft<sup>2</sup>/gal., or FA636 Water Borne Adhesive at 100

ft²/gal.

**Maximum Design** 

**Pressure:** 

-410 psf; (See General Limitation #9.)



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Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

All layers of insulation adhered subsequently membrane adhered. System Type A(22):

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Insulation Layer Insulation Fasteners** Fastener (Table 3) Density/ft<sup>2</sup> **DensDeck Prime** Minimum 0.25" thick N/A N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

**Membrane:** Solar Brite EV or Solar Brite cover adhered to the DensDeck Prime with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sp. To the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

-420 psf (See General Limitation #9.) **Pressures:** 



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**Membrane Type:** Single Ply, Thermoplastic Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

All layers of insulation adhered subsequently membrane adhered. System Type A(23):

All General and System Limitations apply.

One or more layers of the following insulations:

**Base Insulation Layer Insulation Fasteners Fastener** (Table 3) Density/ft<sup>2</sup> ACFoam-II Minimum 1.5" thick N/A N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 25 lbs/square. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite roof cover adhered to the insulation with LA432M Bonding Adhesive applied at

an application rate of 0.5 gal/square (applied to both substrate and roof cover).

**Maximum Design** 

**Pressure:** 

-495 psf; (See General Limitation #9.)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type B:** Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	<b>Insulation Fasteners</b>	<b>Fastener</b>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3		
Minimum 1.5" thick	2, 7	1:2 ft <sup>2</sup>
Minimum 2" thick	2, 7	1:4 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer (Optional)	<b>Insulation Fasteners</b>	<b>Fastener</b>
	<u>(Table 3)</u>	<u>Density/ft<sup>2</sup></u>
ACFoam-II, Multi-Max FA-3, ENRGY 3, H-Shield		
Minimum 1.5" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup> or <sup>3</sup>/<sub>4</sub>" to 1" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Insulation Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft<sup>2</sup>.. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Vapor Retarder:** (Optional) Any UL or FM approved vapor retarder may be installed over the deck or the base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck, DensDeck Prime applied to the base or top insulation layer in a full

mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or in <sup>3</sup>/<sub>4</sub>" to 1" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Insulation Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft<sup>2</sup>.

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Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 1 gal. per 100 ft² or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure:

-45 psf (See General Limitation #9.)



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type C:** All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum 1" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3		
Minimum 1.5" thick	2 or 7(#14)	1:2 ft <sup>2</sup>
Minimum 2" thick	2 or 7(#14)	1:4 ft <sup>2</sup>
DensDeck Prime		
Minimum ½" thick	2 or 7(#14)	$1:1.7 \text{ ft}^2$
Minimum 1/4" thick	2 or 7(#14)	$1:1.3 \text{ ft}^2$

Note: All layers shall be simultaneously fastened; see top or base layer for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Vapor Retarder: (Optional) Any UL or FM approved vapor retarder may be installed over the deck or the base

layer of insulation.

**Fire Barrier:** (Optional) See DensDeck Prime in Top Insulation Layer, above.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressures:** 

-45 psf (See General Limitation #7.)



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 34 of 47 Membrane Type: Single Ply, Thermoplastic Deck Type 3I: Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type D(1): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

ENRGY 3, Multi-Max FA-3, H-Shield, ACFoam-II

Minimum 1.5" thick N/A N/A

(Optional) Top Insulation Layer Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

DensDeck, DensDeck Prime

Minimum <sup>1</sup>/<sub>4</sub>" thick N/A N/A

FiberTop E, Approved High Density Roof Fiberboard

Minimum ½" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Membrane:** Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation as described below.

**Fastening #1:** Trufast #15 EHD fasteners and Trufast 2-3/4" Barbed Seam Plates (EHD) or Trufast #21

SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 12" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum

1.5" heat weld.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Trufast #15 EHD fasteners and Trufast 2-3/4" Barbed Seam Plates (EHD) or Trufast #21

SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 6" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum

1.5" heat weld.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** See fastening methods above



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type D(2): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, Multi-Max-3, H-Shield, ENRGY 3		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB roof cover attached through

the preliminary fastened insulation to the deck following one of the fastening methods

specified below:

**Fastening #1:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 18" o.c. through tabs spaced 51" o.c.

Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure -45 psf. (See General Limitation #7)

**Fastening #2:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. through tabs spaced 51" o.c.

Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure -60 psf. (See General Limitation #7)

**Fastening #3:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. through the top of the roof cover spaced at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are sealed

with 1.5-inch heat weld.

Maximum Design Pressure -75 psf. (See General Limitation #7)



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 36 of 47 **Fastening #4:** Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast

1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. within the 5" closed laps in rows spaced

104.5" o.c. The outside 1.5" of the laps is heat welded.

Maximum Design Pressure -82.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** See Fastening Options Above



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank.

**System Type D(3):** Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

Any approved polyisocyanurate Listed in Table 2

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) '/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as

specified below.

**Fastening #1:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plates, spaced 6" o.c. within the 5" open laps in rows spaced 144.0" o.c., or installed through integral 3-1/2"

fastening tab. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. in the 5" lap of membrane in rows

spaced 72" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #3:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plates, spaced 6" o.c. through the top of the roof cover in rows spaced 144.0" o.c.. Rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of tab or both edges of cover strip are heat welded min. 1.5". Laps are

sealed with 1.5-inch heat weld.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)



NOA No.: 12-1102.04 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 38 of 47 **Fastening #4:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. in the 5" lap of membrane in rows

spaced 51" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #5:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. in the 5" lap of membrane in rows

spaced 96" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #6:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. in the 5" lap of membrane in rows

spaced 51" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Fastening #7:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. within the 5" open laps in rows spaced 72.0" o.c. The outside 1.5" of the lap is heat welded,

or installed through integral 3-1/2" fastening tab.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type D(4):** Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

Any approved polyisocyanurate Listed in Table 2

Minimum 1" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the deck

using Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. through the tabs spaced a maximum of

51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -75 psf (See General Limitation #7)

Or

Solar Brite TopSider system consisting of Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the deck using Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. through the top of the membrane spaced at intervals of 51". Laps are sealed with 1.5-inch

heat weld.

Maximum Design Pressure: -90 psf (See General Limitation #7)

**Maximum Design** 

**Pressures:** See Membrane options above.



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**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type D(5):** Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, Multi-Max-3, Multi-Max FA-3, ENRGY 3, H-Shield		
Minimum 1" thick	N/A	N/A
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Boa	rd	
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

**Fire Barrier:** (Optional) <sup>1</sup>/<sub>4</sub>" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the preliminary fastened insulation

to the deck following one of the fastening methods specified below:

**Fastening #1:** Fasten with OMG #14 Roofgrip and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x

2.75" Oval Barbed Plates spaced 6" o.c. through 5" wide open laps with a minimum 1.5" field weld or through 3.5" fastening tabs; spaced 51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

**Fastening #2:** Fasten with OMG #14 Roofgrip and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x

2.75" Oval Barbed Plates spaced 6" o.c. through roof cover in rows spaced 51" o.c. Rows are

sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap

configuration) over the fasteners. The edge of tab or both edges of cover strip are heat welded

min. 1.5". Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** See Fastening Options Above



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**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type E(1):** Membrane mechanically attached to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck.

Fire Barrier: (Optional) ¼" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover roof cover attached to the deck following one of the

fastening methods specified below:

**Fastening #1:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 18" o.c. through tabs spaced 51" o.c.

Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. through tabs spaced 51" o.c.

Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

**Fastening #3:** Fasten with Dekfast 15 HS, OMG CD-10 fasteners and Dekfast 1.5" x 2.5" Oval Barbed

Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. through the top of the roof cover spaced at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are sealed

with 1.5-inch heat weld.

Maximum Design Pressure: -75 psf. (See General Limitation #7)

**Maximum Design** 

**Pressure:** See Fastening Options above.



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**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

System Type E(2): Membrane mechanically attached to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as

specified below.

**Fastening #1:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. in the 5" lap of membrane in rows

spaced 72" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. in the 5" lap of membrane in rows

spaced 96" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #3:** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c. in the 5" lap of membrane in rows

spaced 51" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #4** Dekfast 15 HS, OMG CD-10 fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or

Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. in the 5" lap of membrane in rows

spaced 51" o.c. The outside 1.5" of the lap is heat welded.

*Maximum Design Pressure: -67.5 psf. (See General Limitation #7)* 

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



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**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type E(3):** Membrane mechanically attached to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the preliminary fastened insulation

to the deck following one of the fastening methods specified below:

**Fastening #1:** Fasten with OMG #14 Roofgrip and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x

2.75" Oval Barbed Plates spaced 6" o.c. through 5" wide open laps with a minimum 1.5" field weld or through 3.5" fastening tabs; spaced 51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

**Fastening #2:** Fasten with OMG #14 Roofgrip and Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x

2.75" Oval Barbed Plates spaced 6" o.c. through roof cover in rows spaced 51" o.c. Rows are

sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap

configuration) over the fasteners. The edge of tab or both edges of cover strip are heat welded

min. 1.5". Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** See Fastening Options Above



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**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type F(1):** Membrane adhered to roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

**Membrane:** Solar Brite EVFB or Solar Brite FB roof cover adhered with FTR 390 asphalt based adhesive

at 1 gal per 60ft<sup>2</sup>. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -237.5 for FTR 390 application. (See General Limitation #9)

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Solar Brite EVFB or Solar Brite FB roof cover adhered to concette deck sealed with polyvinyl alcohol (PVA) with FA561M Water Borne Adhesive. Laps are sealed with 1.5-inch heat weld. *Maximum Design Pressure: –372.5 psf for FA561M Water Borne Adhesive application.* 

(See General Limtation #9)

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Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the primed concrete deck with approved asphalt at 20-25 lbs./sq. or FA636 Water Borne Adhesive at 100 ft²/gal. Laps are

sealed with 1.5-inch heat weld.

Maximum Design Pressure: -572.5 psf for hot asphalt. (See General Limitation #9)

**Maximum Design** 

**Pressure:** See Applications Options above.



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**Membrane Type:** Single Ply, Thermoplastic

**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type F(2):** Membrane adhered to roof deck.

All General and System Limitations apply.

**Primer:** Any approved ASTM D41 Asphaltic Primer

**Membrane:** Solar Brite EVFB or Solar Brite FB roof cover adhered with FA636 Water Borne Adhesive

roller applied at a rate of 0.83 to 1 gal/sq (0.34 to 0.4 l/m<sup>2</sup>) to the substrate. The roof cover

side laps are sealed with a minimum 1.5" heat weld.

**Maximum Design** 

**Pressure:** -300 psf (See General Limitation #9)

**Membrane Type:** Single Ply, KEE

**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** Min. 2500 psi structural concrete or concrete plank

**System Type F(3):** Membrane adhered to roof deck.

All General and System Limitations apply.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered to concrete deck with FA636 Water

Borne Adhesive applied to substrate at a rate of 0.83 gal/sq. The roof cover side laps are

sealed with a minimum 1.5" heat weld

**Maximum Design** 

**Pressure:** -442.5 psf; (See General Limitation #9.)

-495.0 psf; For Solar Brite EVFB (See General Limitation #9.)



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#### **CONCRETE DECK SYSTEM LIMITATIONS:**

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.

#### **GENERAL LIMITATIONS:**

- 1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
- 3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
- 4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
- 5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
- 6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
- 7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
- 8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
- 9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
- 10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

#### END OF THIS ACCEPTANCE



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